Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

7989R Multi-Conductor - 4-Pair UTP Cable for RGB Video



For more Information please call

1-800-Belden1



General Description:

Category 6, 23 AWG bonded pairs solid bare copper conductors, non-plenum, polyolefin insulation, skew 10.0ns/100m nominal, rip cord, PVC jacket.

Setabol Applications: Category 8, UTP Based Vadeo Applications, and KVM Physical Characteristics (Overall) Conductor Figure 3 Bit and a conductor Material A conductors: B	Usage (Overall)	
Concernment 23 Solid BC - Sare Copper Table Note of Conductor Material (a) BC - Sare Copper 8 Table Note of Conductor Material (B) BC - Sare Copper 8 Insulation Material (B) BC - Sare Copper 8 Insulation Material (B) BC - Sare Copper 8 Cuter Sheld (D) Insulation Material (B) BC - Sare Copper Outer Sheld Material: (D) Outer Sheld Material: (D) BC - Sare Copper Outer Jacket Material: (D) Vers Sare Copper Outer Jacket Material: (D) Sare Copper Sare Copper Outer Jacket Material: (D) Sare Record Sare Copper Sare Copper Vers Sare Copper Sare Copper Sare Copper Sare Copper Sare Copper Sare Copper Sare Copper Sare Record Sare Sare Sare Copper Sare Record Sare Sare Sare Sare Sare Sare Sare Sare	Suitable Applications:	Category 6, UTP Based Video Applications, and KVM
Concernment 23 Solid BC - Sare Copper Table Note of Conductor Material (a) BC - Sare Copper 8 Table Note of Conductor Material (B) BC - Sare Copper 8 Insulation Material (B) BC - Sare Copper 8 Insulation Material (B) BC - Sare Copper 8 Cuter Sheld (D) Insulation Material (B) BC - Sare Copper Outer Sheld Material: (D) Outer Sheld Material: (D) BC - Sare Copper Outer Jacket Material: (D) Vers Sare Copper Outer Jacket Material: (D) Sare Copper Sare Copper Outer Jacket Material: (D) Sare Record Sare Copper Sare Copper Vers Sare Copper Sare Copper Sare Copper Sare Copper Sare Copper Sare Copper Sare Copper Sare Record Sare Sare Sare Copper Sare Record Sare Sare Sare Sare Sare Sare Sare Sare	Physical Characteristics (Overall)	
Image: Parisr: AWC Stranding Conductor Material 8 Total Number O Conductors: 8 Image: Conductor Material: Image: Conductor Material:	Conductor	
Total Number of Conductors: 8 Insulation Immuno of Conductors: 8 Insulation Material: Immuno of Conductors: 8 Outer Shield Material: Immuno of Conductors: 8 Outer Shield Material: Immuno of Conductors: 8 Outer Shield Material: Immuno of Conductors: 8 Outer Jacket Material: Immuno of Conductors: Yes Outer Jacket Material: Immuno of Conductors: 9.271 x 4.191 mm Porc - Robining Diameter: 9.271 x 4.191 mm 9.271 x 4.191 mm Pore - Robining Diameter: 9.271 x 4.191 mm 9.271 x 4.191 mm Pore - Robining Diameter: 9.271 x 4.191 mm 9.271 x 4.191 mm Pore - Robining Diameter: 9.271 x 4.191 mm 9.271 x 4.191 mm Pore - Robinical Characteristics (Overall) Immuno of Conductors 1.200 Code Chart: Munder Canage Strips & Crossing and an explanation of Conductors 2.0°C To - 75°C 1.200 Code Chart: Mark Recommended Pulling Tension: 2.22410 N 1.22410 N 1.		
Insulation Insulation Material: Insulation Material: Insulation Material: Insulation Material: Outer Shield Material: Insulation Material: Outer Shield Material: Insulation Material: Outer Shield Material: Insulation Material: Outer Jacket Material: Insulation: Outer Jacket Material: Insulation: Material: Insulation: Image: Insulation:	4 23 Solid BC - Bare Copper	
Impendition Material	Total Number of Conductors:	8
Imputation Material PP-P-Dypropylene Outer Shield Material: Unter Shield Material: Unter Shield Material: Unter Shield Material: Unter Steket		
PP Polypropylene Outer Shield Material: Outer Shield Material: Outer Shield Material: Outer Jacket Material: Multic Green Stripe & Drone Buit Cable Weight: <th></th> <th></th>		
Outer Shield Material: Unshielded Outer Jacket Material: Outer Jacket Material: Outer Jacket Material: Vor alcket Material: Outer Jacket Material: Vor alcket Material: Outer Jacket Ripcord: Yes Overall Nominal Diameter: 9.271 x 4.191 mm Pair Proceocol Color 1 White/Orange Stripe & Blue 2 White/Orange Stripe & Blue 3 White/Orange Stripe & Green 3 White/Orange Stripe & Green 4 White/Orange Stripe & Green 3 White/Orange Stripe & Green 4 White/Orange Stripe & Green 2 White/Orange Stripe & Green 3 White/Orange Stripe & Green 4 White/Orange Stripe & Green 3 Stripe & Green 4 White/Orange Stripe & Green 2 20°C To +75°C Buik Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222 410 N Min. Bend Radius/Minor Axis: 44450 mm Colube Specifications and Agency Compliance (Overall) Ket/UU, Specification: Mic/Lube Stripe S & Bue		
Outer Shield Material: Unshielded Outer Jacket Material: Outer Jacket Material: Outer Jacket Material: Vor alcket Material: Outer Jacket Material: Vor alcket Material: Outer Jacket Ripcord: Yes Overall Nominal Diameter: 9.271 x 4.191 mm Pair Proceocol Color 1 White/Orange Stripe & Blue 2 White/Orange Stripe & Blue 3 White/Orange Stripe & Green 3 White/Orange Stripe & Green 4 White/Orange Stripe & Green 3 White/Orange Stripe & Green 4 White/Orange Stripe & Green 2 White/Orange Stripe & Green 3 White/Orange Stripe & Green 4 White/Orange Stripe & Green 3 Stripe & Green 4 White/Orange Stripe & Green 2 20°C To +75°C Buik Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222 410 N Min. Bend Radius/Minor Axis: 44450 mm Colube Specifications and Agency Compliance (Overall) Ket/UU, Specification: Mic/Lube Stripe S & Bue	Outer Shield	
Unshielded Outer Jacket Material: Duter Jacket Material: PVC - Polyvinyl Chloride Outer Jacket Ripcord: Yes Outer Jacket Ripcord: 9.271 x 4.191 mm Pair Pair Color Code Chart: Number Color 1 1 White/Brown Stripe & Blue 2 White/Orange Stripe & Orange 3 White/Orange Stripe & Green 4 Stripe A Stripe X Mine Green Stripe & Green -20°C To +75°C Buik Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Collabel Specifications and Agency Compliance (Overall) Mine Bend Radius & Environmental Programs NeC/(UL) Specification: <td< th=""><th>Outer Shield Material:</th><th></th></td<>	Outer Shield Material:	
Outer Jacket Material: Outer Jacket Material: Outer Jacket Material: Overall National PVC - Polyvinyl Chloride Outer Jacket Ripcord: Yes Overall Cable 9.271 x 4.191 mm Overall Nominal Diameter: 9.271 x 4.191 mm Pair Pair Color Code Chart: Number Color Vhite/Brown Stripe & Blue 2 White/Orenge Stripe & Orange 3 White/Orenge Stripe & Orange 3 White/Orenge Stripe & Orange 4 White/Oren Stripe & Orange 3 White/Oren Stripe & Orange 4 White/Oren Stripe & Orange 3 White/Oren Stripe & Orange 4 Stripe & Stripe & Orange 20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radus/Minor Axis: 44.450 mm Mine. Bend Radus/Minor Axis: 40.100 N Min. Bend Radus/Minor Axis: 40.101 Specification: CMR <th></th> <th></th>		
Outer Jacket Material: Outer Jacket Material: Outer Jacket Material: Outer Jacket Material: Outer Jacket Material: Verail Nomide Duter Jacket Material: Verail Nomide Outer Jacket Material: Verail Nomide Overail Cable 9.271 x 4.191 mm Pair Pair Color Code Chart: Number Color 9.271 x 4.191 mm Pair Color Code Chart: Number Color Number Color Verail Nominal Diameter: 2 White/Green Stripe & Orange 3 White/Green Stripe & Green 4 White/Green Stripe & Green 4 White/Green Stripe & Green Max. Recommended Pulling Temperature Range: -20°C To +75°C Buik Cable Weight: 43 158 Kg/Km Max. Recommended Pulling Tension: 222410 N Min. Bend Radius/Minor Axis: 44 450 mm Applicable Specifications and Agency Compliance (Overall) Mine Compliance (Overall) Min. Bend Radius/Minor Axis: CMR		
PVC - Polyulnyl Chloride Ves Outer Jacket Ripcord: 9.271 x 4.191 mm Porall Cable 9.271 x 4.191 mm Pair Pair Color Code Chart: Pair Color Code Chart: Vinite/Green Stripe & Blue 2 White/Blue Stripe & Blue 2 White/Green Stripe & Orange 3 White/Green Stripe & Green 4 White/Green Stripe & Brown Munde: Screen Munde: Screen Autorite/Green Stripe & Brown -20°C To +75°C Buik Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Verall) Min. Bend Radius/Minor Axis: Min: Bend Radius/Minor Axis: CMR		
Outer Jacket Rijpcord: Yes Overall Cable 9.271 x 4.191 mm Pair Pair Pair Color Code Chart: Number Color Number Color 9.271 x 4.191 mm Pair Verial Cable Secondary Number Color 9.271 x 4.191 mm Pair Pair Secondary Number Color Secondary Secondary Operating Temperature Range: -20°C To +75°C Secondary Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Applicable Specifications and Agency Compliance (Overall) Ker (UL) Specification: CMR	Outer Jacket Material	
Overall Cable 9.271 x 4.191 mm Pair Pair Color Code Chart: Number Color 1 2 White/Drange Stripe & Blue 2 White/Orange Stripe & Orange 3 White/Orange Stripe & Green 4 White/Orange Stripe & Brown Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs NEC/(UL) Specification: CMR	PVC - Polyvinyl Chloride	
Overall Nominal Diameter: 9.271 x 4.191 mm Pair Pair Pair Pair Color 1 White/Blow Stripe & Blue 2 White/Orange Stripe & Blue 2 White/Orange Stripe & Bromp 3 White/Green Stripe & Green 4 White/Brown Stripe & Brown Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radlus/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) MC(UL) Specification: CMR	Outer Jacket Ripcord:	Yes
Pair Pair Color Code Chart: 1 White/Blue Stripe & Blue 2 White/Orange Stripe & Orange 3 White/Orange Stripe & Green 4 White/Brown Stripe & Brown Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Acmin Colspan="2">CMR	Overall Cable	
Pair Color Code Chart: Number Color 1 White/Blue Stripe & Blue 2 White/Blue Stripe & Orange 3 White/Crange Stripe & Orange 3 White/Green Stripe & Green 4 White/Brown Stripe & Brown Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) KeC/(UL) Specification: C/MR	Overall Nominal Diameter:	9.271 x 4.191 mm
Number Color 1 White/Blue Stripe & Blue 2 White/Orange Stripe & Orange 3 White/Green Stripe & Green 4 White/Brown Stripe & Brown Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs NEC/(UL) Specification: CMR		
2 White/Orange Stripe & Orange 3 White/Green Stripe & Green 4 White/Brown Stripe & Brown Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs CMR		
3 White/Green Stripe & Green 4 White/Brown Stripe & Brown Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Acomplicable Specifications and Agency Compliance (Overall) Mplicable Standards & Environmental Programs CMR		
4 White/Brown Stripe & Brown Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Kec/(UL) Specification: MR		
Mechanical Characteristics (Overall) Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs CMR		
Operating Temperature Range: -20°C To +75°C Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall's Environmental Programs NEC/(UL) Specification: CMR		
Bulk Cable Weight: 43.158 Kg/Km Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs NEC/(UL) Specification: CMR		
Max. Recommended Pulling Tension: 222.410 N Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs NEC/(UL) Specification: CMR		
Min. Bend Radius/Minor Axis: 44.450 mm Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs NEC/(UL) Specification: CMR	Bulk Cable Weight:	43.158 Kg/Km
Applicable Specifications and Agency Compliance (Overall) Applicable Standards & Environmental Programs NEC/(UL) Specification: CMR	Max. Recommended Pulling Tension:	222.410 N
Applicable Standards & Environmental Programs NEC/(UL) Specification: CMR	Min. Bend Radius/Minor Axis:	44.450 mm
NEC/(UL) Specification: CMR	Annelis ship One sifis stirms and Anners Open sites as (O	vorall
		verally
	Applicable Standards & Environmental Programs	
CEC/C(UL) Specification: CMG	Applicable Standards & Environmental Programs NEC/(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II): Yes	Applicable Standards & Environmental Programs	
EU CE Mark: No	Applicable Standards & Environmental Programs NEC/(UL) Specification: CEC/C(UL) Specification:	CMR CMG
EU Directive 2000/53/EC (ELV): Yes	Applicable Standards & Environmental Programs NEC/(UL) Specification: CEC/C(UL) Specification: EU Directive 2011/65/EU (ROHS II):	CMR CMG Yes
EU Directive 2002/95/EC (RoHS): Yes	Applicable Standards & Environmental Programs NEC/(UL) Specification: CEC/C(UL) Specification: EU Directive 2011/65/EU (ROHS II): EU CE Mark:	CMR CMG Yes No

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

7989R Multi-Conductor - 4-Pair UTP Cable for RGB Video

EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Applicable Patents:	
Country www.belden.com/p	
lame Test	
UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4
lenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	7989P
Capacitance (pF/m)	
49.215	
49.215 Maximum Capacitance Unbalance (pF/100 m):	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation:	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m):	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%)	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%) 70	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%) 70 ypical Delay Skew: Delay Skew (ns/m)	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%) 70 ypical Delay Skew: Delay Skew (ns/m) 0.100 laximum Conductor DC Resistance: DCR @ 20°C (Ohm/100 m)	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%) 70 ypical Delay Skew: Delay Skew (ns/m) 0.100 laximum Conductor DC Resistance: DCR @ 20°C (Ohm/100 m) 9	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%) 70 ypical Delay Skew: Delay Skew (ns/m) 0.100 laximum Conductor DC Resistance: DCR @ 20°C (Ohm/100 m) 9 lax. Operating Voltage - UL:	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%) 70 ypical Delay Skew: Delay Skew (ns/m) 0.100 laximum Conductor DC Resistance: DCR @ 20°C (Ohm/100 m) 9	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%) 70 ypical Delay Skew: Delay Skew (ns/m) 0.100 laximum Conductor DC Resistance: DCR @ 20°C (Ohm/100 m) 9 lax. Operating Voltage - UL: Voltage	49.2
49.215 Maximum Capacitance Unbalance (pF/100 m): ominal Velocity of Propagation: VP (%) 70 ypical Delay Skew: Delay Skew (ns/m) 0.100 laximum Conductor DC Resistance: DCR @ 20°C (Ohm/100 m) 9 lax. Operating Voltage - UL: Voltage 300 V RMS	49.2

Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.0	74.3	72.3	70.3	20.0
4	3.8	65.3	63.3	59.5	23.0
8	5.3	60.8	58.8	53.4	24.5
10	6.0	59.3	57.3	51.3	25.0
16	7.6	56.3	54.3	46.7	25.0
20	8.5	54.8	52.8	44.3	25.0
25	9.5	53.4	51.4	41.8	24.3
31.25	10.7	51.9	49.9	39.2	23.6
62.5	15.4	47.4	45.4	30.0	21.5
100	19.8	44.3	42.3	22.5	20.1
155	25.2	41.5	39.5	14.3	18.8
200	29.0	39.8	37.8	8.8	18.0
250	32.8	38.3	36.3	3.5	17.3

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	67.8	64.8
4	100 ± 15	55.7	52.7
8	100 ± 15	49.7	46.7
10	100 ± 15	47.8	44.8
16	100 ± 15	43.7	40.7
20	100 ± 15	41.7	38.7
25	100 ± 15	39.8	36.8

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

7989R Multi-Conductor - 4-Pair UTP Cable for RGB Video

31.25 100 ± 15	37.9	34.9	
		0.1.0	
62.5 100 ± 15	31.8	28.8	
100 100 ± 15	27.8	24.8	
155 100 ± 22	23.9	20.9	
200 100 ± 22	21.8	18.7	
250 100 ± 32	19.8	16.8	

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7989R 0131000	1,000 FT	32.000 LB	BLUE, DARK	С	4 PR #23 PP PVC

Notes: C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 03-11-2014

© 2015 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information and belief at the date of its publication. The information provided in this Product Disclosure, is denied on the product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product tiself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product. product.